

**APPLICATION FOR UNITED STATES LETTERS PATENT**

**for**

**Electronic Stockroom and Catalog**

**by**

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## **BACKGROUND OF THE INVENTION**

The present invention relates generally to the field of electronic commerce and more specifically to a method of optimizing the purchasing process within a centralized or dispersed company or organization.

It is common for businesses to keep a stockroom of items that are required for their daily activities. For most businesses, these stocked items consist mainly of paper products and business machine refills: notepads, computer paper, printer ink cartridges and toner for copy machines. Such stockrooms may also include other items like paperclips and staples however, they do not include all of the items the entire business will need for production of its product or service. In order to acquire all of the materials a business needs, usually a purchaser or other employee must refer to one or more vendor catalogs.

Business product catalogs come in many different shapes, sizes and in regards to computer related item, formats. In order to stay competitive and to take advantage of electronic commerce most vendors and producers have made their product catalogs available in some electronic form. These electronic catalogs may come in the form of a Compact Disc (CD) that can be distributed to customers or the catalog information may be stored in a server that customers can access via the Internet.

In both of these cases a vendor must invest money in the production of the electronic catalogs. All of the vendor's product information must first be stored in electronic format. Then the information must be stored on a CD or in the memory of a server. In the case of a CD, the vendor must pay for mass copying of the CD followed by mass distribution, which includes gathering address information on potential customers and postage charges. When the vendor is ready to publish a new catalog, or just wants to make changes to a few items in the old catalog, the vendor must make, copy and distribute an entirely

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new CD. If the vendor chooses to put their catalog on-line, then they must involve themselves in setting up a website and absorb all of the costs associated with establishing and maintaining the website.

Websites typically reside on the World Wide Web, in a server for example, that is accessed via the Internet from a remote location. Multimedia documents found on the World Wide Web are called Web pages. Linking information together with hyperlinks is accomplished by special computer programs or computer languages. Computer languages used to create Web pages are HyperText Markup Language (HTML) and JAVA. A multimedia device should have a keyboard and a pointing device, such as a mouse or pen, so that the user can direct the associations between multimedia elements.

Photographs, drawings, and other still images must be changed into a format that the computer can manipulate and display. Such formats include bit-mapped graphics and vector graphics. Bit-mapped graphics store, manipulate, and represent images as rows and columns of tiny dots. In a bit-mapped graphic, each dot has a precise location described by its row and column, much like each house in a city has a precise address. Some of the most common bit-mapped graphics formats are called Graphical Interchange Format (GIF), Tagged Image File Format (TIFF), and Windows Bitmap (BMP). Vector graphics use mathematical formulas to recreate the original image. In a vector graphic, the dots are not defined by a row-and-column address, rather they are defined by their spatial relationships to one another. Because their dot components are not restricted to a particular row and column, vector graphics can reproduce images more easily and thus provide better output on most video screens and printers. Common vector graphics formats are Encapsulated Postscript (EPS), Windows Metafile Format (WMF), Hewlett-Packard Graphics Language (HPGL), and Macintosh graphics file format (PICT).

A modem, which stands for modulator-demodulator, is the device that



only contents and many multimedia documents provide access to text-only versions of their files. The process of retrieving files from a remote server to the user's terminal is called downloading. The process sending files to a remote server from a user's terminal is called uploading.

No matter what electronic format a vendor chooses, CD or website, each is flawed, in that neither one can fulfill all of the needs of all of the employees of a given company or organization. It is virtually impossible for a medium or large sized company to find one vendor's catalog that can provide all of the products that are required by that medium or large company.

### **SUMMARY OF THE INVENTION**

According to the preferred embodiment, an intranet based comprehensive ordering system is provided that allows authorized employees to search from multiple vendor/manufacture catalogs that are stored in a server on a company's intranet. The present Electronic Stockroom and Catalog (ESAC) allows vendors to download their catalogs to the system for storage, browsing and possible purchase by authorized employees. ESAC also allows vendors to update catalogs that may already be in the system. ESAC stores the catalogs and provides the employee with the ability to simultaneously search all of the vendors catalogs for desired items. Thus, employees have access to a wide diversity of items. The present system is an attempt at providing the company with one-stop-shopping for every item that every employee will ever need in the course of their employment. If the desired item is available on-site i.e., in one of the stockrooms of the company, then ESAC informs the employee and provides location information relating to the desired item. Items for sale are browsed via a friendly ESAC interface that allows the employee to search for items using keywords, part numbers and other search methods, such as hierarchical for example. If the desired item is not available on-site, then the item can be

ordered from a vendor. Generally speaking, the ESAC operates within the security of a company firewall and access is not available to unauthorized personnel or the general public who may try to access ESAC via the Internet.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

The preferred embodiment will now be described in more detail with reference to the accompanying drawings, given only by way of example, in which:

Figure 1 is a generalized block diagram of the preferred embodiment;  
Figure 2 is a general flow chart for the preferred embodiment; and  
Figure 3 is flow chart for the vendor catalog download process.

### **DETAILED DESCRIPTION OF THE INVENTION**

The present Electronic Stockroom and Catalog (ESAC) embodies the notion of a comprehensive distributor by providing access to products both within a company and outside the company, while operating within the safety of a secure corporate firewall. Because of the security provided, the preferred embodiment enjoys full integration with corporate budget, finance and accounting systems, while retaining all the benefits of having access to the Internet. Integration with other company files allows automated budget tracking, payment for purchases and other desired accounting.

Figure 1 shows employee(s) 3-5 of a company using the preferred embodiment. Each of the employees 3-5 has determined that it is necessary to locate or purchase an item that is needed in the course of their business. Employees 3-5 may be within the same building or dispersed throughout several buildings. In both cases their terminals are connected by a LAN that makes up the company's intranet. Server 2 stores and executes the Electronic Stockroom and Catalog (ESAC) program. The server 2 is physically located within one of









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